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ABSTRACT

The three research studies reported explore the idea that the systematic analysis of responses to interracial pictures and pictures of poverty can provide insights that will be useful in understanding and working through interracial and poverty related problems. According to the theory of projective techniques, responses to pictures provide us with rich material on emotions. Osgood's Semantic Differential provides a potential means to analyze these responses. Two theoretical sets of ideas are brought together and also applied to fields of application relevant to social work. Some of the results are: (1) the Semantic Differential pattern of analysis can be applied when slide pictures are used as stimuli; in addition, attitude scales could be developed to masure hard to define attitudes; (2) elicitation and analysis of thematic stories from candid photographic slides of racial and interracial scenes are considered reliable and may have utility in identifying and crudely differentiating racial attitudes; and (3) both subjective analysis and systematic, objective analysis of thematic material are possible; the combined materials are considered to provide rich and objective sources for psychological study. [Table 12 on page 24 of the document may not be distinctly legible in hard copy (HC) reproduction.] (Author/JW)

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# An Analysis of the Affective Meaning of Racial and Interracial Photographs

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## Preface

This research monograph explores the idea that the systematic analysis of responses to interracial pictures and pictures of poverty, which are a closer representation of real life than mere words, can provide us with insights that will be useful in understanding and working through interracial and poverty related problems among ourselves and with our clients. Responses to pictures provide us with rich material which reflects alot about our own feelings according to the theory of projective techniques. Osgood's Semantic Differential provides a potential means to analyse these responses and is based on a well developed theory of the psychological meaning of words. This research then marries not only two theoretical sets of ideas but then applies them to fields of application that are of considerable relevance to Social Work.

### Some Potential Applications

The potential applications of these new measurement tools to Social Work are many. We can at this point see a few immediate possibilities if we had valid, non-obvious, reliable, theoretically rich and objective measures of "attitude toward interracial situations" and "attitude toward people in poverty."

It would be of considerable usefulness if we could assess social workers' attitudes and social work students' attitudes in these areas. First, it would be valuable to be able to assess the degree to which negative attitudes in these areas interfere with adequate functioning of social workers and conversely how positive attitudes in these areas facilitate adequate social worker functioning in these types of situations. While it is clear that attitudes and behavior are not always correlated, in these sensitive areas it is very likely that appropriate positive attitudes support a social worker's ability to function in these areas.

Secondly, it would be helpful to be able to evaluate the impact of M.S.W.

training on social workers' attitudes as well as their functioning in interracial and poverty situations. It is generally assumed that M.S.W. training improves our students attitudes or functioning in these areas. It would be very interesting if we could empirically check the answer to these questions.

Third, it would be of considerable usefulness to those people who teach Race Relations and Human Relations courses to be able to evaluate the impact of their programs on their students attitudes. I would expect that some would find that they are not too effective in changing attitudes. Others would find that they are partially effective and some few would find that they can and do improve their participants attitudes in desired directions. We would after sufficient evaluative efforts be able to sort out what kind of programs do work on what types of people in order to have the desired outcomes.

Fourth, if we had such measurement tools as are being sought here we would be able to select not only social workers with desirable attitudes but teachers, policemen and others who might, in order to function effectively in these types of situations, need to have a positive attitude toward interracial situations and/or people in poverty.

Acknowledgments

In this project we have had considerable help from others. We would like to give special acknowledgment to the work of some of our former students who have helped on the project which generated this report. They included Barbara Stoker, Gail Walker, Ruth Kaminsky and Hilda Silverman. Finally, I would like to thank my secretary Miss Bessie Vasiliou for her patience and competence throughout this project and Professor Ludwig Geismar and Dean Werner Boehm for their helpfulness.

It should also be noted that the papers in this monograph in slightly different form are to be presented at the American Psychological Asscciation Meetings in Miami Beach, Florida on September 4, 1970.

Bernard P. Indik

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# Introduction - One Picture is Worth a Thousand Words: The Picture-Semantic Differential[1]

Bernard P. Indik

About a year and a half ago several of us were interested in the development of measures of attitudes in the area of race relations. It happened also that we were rather dissatisfied with the present measures because they were blatantly obvious and, therefore, easily faked and furthermore they did not give us any real richness of information or real depth of understanding. We also were looking for a method which would allow us to easily and systematically score this type of "rich" measure. Finally, we were looking for a method that was reasonably consonant with the advances in our understanding of theories of attitudes.

With these four major considerations in mind Drs. Zito, Roth and I had a series of think sessions to try to develop some ideas and a plan of attack on these questions. At the time I had been using the Semantic Differential as an attitude measure using various stimulus words such as "white man," "me," "Negro," "black power," "school," etc., with the analysis format of the Semantic Differential (Osgood, Suci and Tannenbaum, 1957 and Osgood, 1962) as modified by Levin, 1964.

Drs. Zito and Roth had an interest in using interracial pictures in some systematic way, so as to assess people's feelings with this particular type of stimulus. We also had the kind cooperation of Mr. Sam Tamashiro, who had quite a number of pictures that had some potential for this purpose, which he made into slides for our use for research purposes.

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[1]Publication of these studies was made possible by a Public Health Service Biomedical Sciences Support Grant to the Rutgers Social Work Research Center.

The idea struck me that the theoretical approach that I had been taking, in using the Semantic Differential framework as a measuring device of attitude toward various concepts (stimuli), might well apply with these pictures in the area of race relations. That is, the evidence so far seems to indicate that the Evaluation (E), Potency (P), and Activity (A) factors of affective meaning coordinate rather well with what seems to be meant conceptionally by the concept attitude (Krech, Crutchfield and Ballachey, 1962). This is true if the stimulus word is a concept that generates attitudinal meaning in the sense that "Evaluation" reflects favorable vs. unfavorable, "Potency" reflects intensity of feeling and "Activity" reflects the relative propensity to behave in ways related to this attitude.

Further, in a series of my own and my students studies, (Indik, 1968; Indik and Seymore 1969; Levin, 1964; Gold, 1970; and Schlesinger 1970), we have found that the Semantic Differential approach to attitude measurement with words as stimuli have produced positive and interesting results in sensitive areas of attitude measurement and with highly sensitive samples, where the usual methods of obvious attitude measurement would have been inadequate and/or unacceptable to the human subjects being measured.

In the area of the use of pictures of human beings as stimuli, very little seems to have been done using the Semantic Differential approach except for one analysis of single person photographs (Kuusinen, 1968) in terms of personality scales. However, little analysis of interracial pictures has been done to our knowledge.

It seemed reasonable that as a first step we could use the same approach with the same sixteen adjectival pairs reflecting E, P and A as a first attempt at measuring the effective attitudinal component of the racial and interracially focussed pictures.

As a first attempt we selected eleven pictures and applied the Semantic Differential approach to the responses of various groups of subjects.

Three studies are presented in the following papers which analyse the findings of our inquiries into how people react to pictures.

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# A Semantic Differential Approach to the Analysis of Racial and Interracial Photographs

by

Bernard P. Indik, Robert J. Zito
and Jay Roth

Osgood (1969) has suggested that there exists a generality and invariance of the structure of affective meaning into the usual factors of Evaluation, (E), Potency (P) and Activity (A) when the stimuli reacted to are single words. This paper will explore the findings obtained when subjects consider slide photographs, rather than words, as stimuli. Kerrick (1955, 1959) and Freedman et. al (1964) have used the Semantic Differential with TAT pictures, but not with interracial pictures. Further, the focus of our studies relates to racial and interracial (slides) stimuli which are responded to in a variety of ways.

Several studies have used "racial" words as stimuli and Semantic Differential response analysis schemes to analyse the cognitive meaning of these stimuli (Williams, 1966; Indik, 1968; Indik and Seymore, 1969). These studies all seemed to indicate that attitudinal measurement was feasible using this format and approach with a wide variety of people, ranging from college students (Williams, 1966), to white and black policemen, to poor urban blacks (Indik, 1968) and young black and Puerto Rican high school dropouts (Indik and Seymore 1969). The present study is designed to explore in considerable detail the degree to which racial and interracial slide photographs can be analysed using the Semantic Differential response approach. We will explore whether and to what degree the Evaluative (E), Potency (P), and Activity (A) factors and their associated item pairs as developed in Levin (1964) apply to the analysis of responses to photographic slides.

## Method

Procedure: The subjects were assembled in groups and given standard instructions which were read by the subjects and by the experimenter as follows:

We are going to show you a series of slides. The purpose of this measure is to see how you feel about certain things. There is no right answer and no wrong answer. Your answer will be used in no way to judge you. We just want your frank opinion. On each page of this section you will find a series of word pairs arranged in the following way:

GOOD_____: _____: _____: _____: _____: _____: _____: BAD

Here is how you are to use the scales:

You will put an X in the middle of the line section that best described how you feel about the scene to be rated. Each line section has a meaning.

Scene #1

| GOOD | | | | | | | | BAD |
|---|---|---|---|---|---|---|---|---|
| | feel strongly good | feel pretty much good | feel only slightly good | neither good or bad or don't know | feel slightly bad | feel pretty much bad | feel strongly bad | |

If for example in giving your opinion you felt the scene was very bad, you would mark as follows:

GOOD_____: _____: _____: _____: _____: _____: X : BAD

If you thought it was strongly good, you would mark:

GOOD X : _____: _____: _____: _____: _____: _____: BAD

If you don't make up your mind or if you felt it was neither good or bad, you would mark:

GOOD_____: _____: _____: X : _____: _____: _____: BAD

On the following pages -- one page for each scene presented -- you are to rate the scene according to all 16 of the scales on the page.

Remember

1. Make your mark in the middle of the space

   _____: X : _____: this
   _____: _____X_____: _____: not this

2. Please do not skip any scales. Mark the middle line if you cannot make up your mind.
3. Never put more than one X on a scale.

Important: If you don't understand the instructions, ask the person who is administering the session. If you want to, you may remove the instruction sheet to refer to as you go through the questions.

Eleven slide scenes were shown in the order shown in Table 13. After each scene was exposed by an opaque projector, respondents were given sufficient time to complete the Semantic Differential on sixteen adjectival pairs for each scene as follows:

| | | | | |
|---|---|---|---|---|
| Evaluation | (7) | good | (1) | bad |
| Potency | (1) | soft | (7) | hard |
| Activity | (7) | active | (1) | passive |
| Evaluation | (1) | cruel | (7) | kind |
| Potency | (7) | strong | (1) | weak |
| Activity | (1) | calm | (7) | excitable |
| Evaluation | (7) | clean | (1) | dirty |
| Potency | (1) | light | (7) | heavy |
| Activity | (7) | hot | (1) | cold |
| Evaluation | (1) | unsuccessful | (7) | successful |
| Potency | (7) | masculine | (1) | feminine |
| Activity | (1) | slow | (7) | fast |
| Evaluation | (7) | important | (1) | unimportant |
| Potency | (1) | small | (7) | large |
| Evaluation | (1) | foolish | (7) | wise |
| Evaluation | (7) | healthy | (1) | sick |

The placement of each of these item pairs on their respective E, P, A factors was done on the basis of prior studies analyses (Levin, 1964; Indik, 1968 and Indik and Seymore 1969). Total scores for each of the three factors were obtained by summing scores of respondents on each pair of adjectives of their respective factors noted above.

Subjects: Data were obtained from one hundred and forty six subjects. They included 53 Northeastern white evening college students, 44 Southern black day college students, 28 Northeastern white junior high school students, 20 Northeastern white graduate students and faculty and one black faculty member from the Northeastern U.S.A.

## Results

For each of the eleven slide pictures the responses of the 146 subjects were intercorrelated for each of the 16 item pairs. Summary scores for Evaluation, Potency, and Activity from the addition of the scores of each individual's response were obtained within each factor. Item vs. total "factor" scores were correlated for each scene, then we had three correlation matrices: one for Evaluation, one for Potency and one for Activity. The tables for each scene's responses appear in the Appendix Tables 1 to 11 for the 146 subjects. The p value for r.05 equals .15 and for r.01 equals .20.

From these eleven tables it is clear that the item pairs usually considered "Evaluative Factor" item pairs showed reasonable high positive (and statistically significant) inter-item and item-total score inter-correlations. The only exceptions occur for the item response pair important-unimportant for scenes 4, 5 and 8. This is not too surprising since this adjectival pair is the most marginal of the Evaluative word pairs that was used.

The results for the "Potency Factor" in the Appendix Tables 1-11 show a more mixed set of findings. Here we see that the inter-item correlations are, on the average, lower than for the items within the "Evaluative Factor," and in the Potency matrices more frequently the sign of the correlations is minus. The item-total correlations for the Potency Factor items, while positive and statistically significant for each item pair for each of the eleven scenes, were on the average smaller in size of correlation than was found for the item-total factor correlations for the "Evaluative Factor." These findings indicate that the Potency measures are less internally consistent

that the Evaluative measures though they do generally show some cohesion.

The results for the "Activity Factor" matrices is even more mixed than the matrices for the "Potency Factor." The tables for the "Activity Factors" for scenes 1, 4, 5 and 8 show positive and mostly statistically significant inter-item correlations and quite high item-total score intercorrelations. The "Activity Factors" for scenes 3, 9 and 11 also showed some internal cohesion, however, less than for the scenes 1, 4, 5 and 8. The "Activity Factors" for scenes 2, 6, 7 and 10 showed even less internal cohesion, for here there were one or more negative inter-item correlations and more frequently low and not statistically significant positive inter-item correlations. Also for these four scenes the "Activity Factor" showed lower item-total factor intercorrelations.

We can next examine Appendix Table 12 which shows the interrelationships of each of the three factors (E, P, and A) for each of the eleven scenes. The usual pattern of findings when words are used as stimuli is that for a given word the three factors are generally not correlated. However, when photographic slides are used as stimuli we find that for each scene of the eleven scenes there is a positive and statistically significant correlation between the Potency Factor and the Activity Factor and in 8 of the 11 cases the correlation is $r = .40$ or more. The Evaluative Factor is significantly related to the Activity Factor in only 2 of the 11 scenes in the positive direction though generally the size of the correlation between Evaluation and Activity within each scene is low but positive. A more mixed set of findings occur when we examine the relationship between the Evaluation and Potency Factors within each of the 11 scenes. Here we find generally low

correlations, some (mostly) positive some negative and some close to zero.

Table 12 also allows us to inquire into whether there is some inter-relationship between the factors that were developed on one scene with the factors developed from the analysis of the factors developed from other scenes. It is clear from Table 12 that Evaluation, Potency and Activity on scenes 5 and 9 are significantly related +.58, +.35 and +.46 respectively. That is Evaluation on scene 5 is related to Evaluation on scene 9 and Potency on scene 5 with Potency on scene 9 and Activity on scene 5 with Activity on scene 9. These two scenes are the same picture taken at different sizes. Scenes 3 and 10 are also similarly related, the correlations in this case are +.65 for the two "evaluation Factors," +.34 for the two "Potency Factors" and +.40 for the two "Activity Factors." These two scenes both show white adults helping black children.

Scenes 4 and 8 which are both scenes depicting poverty situations also show a set of relationships which are similar to the above. That is, scene 4 Evaluation and scene 8 Evaluation are correlated .51 while the two Potency Factors are correlated .48 and the two Activity Factors are correlated +.33. Scene 4 is a picture of a crowded tenement porch and scene 8 is a picture of several poor people on the street in front of a pawnshop.

In order to explore the meaning of these eleven scenes a bit more we can examine Table 13, which shows the average scores for the 146 subjects that were studied on each of the three factors examined for each of the 11 scenes. With reference to Evaluation which can vary from a low score of 7.0 to a high score of 49.0, we find scene 3 and 10 showing the highest average positive scores 42.3 and 42.0 respectively. These are the two scenes which depict white adults helping black children. The scenes which generate the

lowest average scores on Evaluation are scene 4 and 8 which score 18.7 and 19.9 respectively. These two scenes depict poverty and are seen as much less positive.

With reference to Potency, which allows a low score of 5.0 to a high score of 35.0, we find that scene 7 which depicts black children lifting weights on a playground (scene 7) as showing the most Potency (25.7) and the black man in a Dashiki (scene 1) showing the next highest amount of Potency. The lowest potency scene is, as we might have suspected, scene 11 which depicts a cute little black girl with a rather helpless look on her face. (See Table 13).

The Activity dimension which could possibly vary from a low of 4.0 to a high of 28.0 shows the least variability of the eleven scenes. Scene 11, which is the picture of the little black girl, shows the lowest average Activity score (13.5) while two other scenes (scenes 1 and 2), showing men seated also show low average Activity scores (13.8 and 13.7) respectively. The highest average Activity score (19.1) is shown in response to picture 7 which depicts a number of black children who are lifting weights while on the playground.

The data in Table 13 generally seem to support the ideas of analysing these scenes in terms of the three factors considered, since the high and low scores found seem to be clearly related to the meaning implicit in these factors.

## Discussion and Conclusions

We have in this paper explored to what degree the Semantic Differential pattern of analysis, which has been used to develop our understanding of how

people respond to words as stimuli, can be applied when slide pictures are used as stimuli instead. The answer to this question, with reference to the eleven pictures that were used, was mixed. The Evaluative dimension seemed to hold together. For each scene the Evaluation Factor showed reasonably high inter-item correlations and quite high item-total correlations. The only adjectival pair which showed some lack of correlation on Evaluation of the seven pairs that were used was the important-unimportant pair which for some scenes did not materially correlate on the Evaluative dimension. It was interesting to note that for both the "Potency Factors" and the "Activity Factors" there was less internal consistency within some of the correlation matrices for several of the scenes studied. Also we found a consistent significant positive correlation between the Potency Factor in each of the scenes with its Activity Factor, which would indicate some overlap in meaning between these two factors that needs to be explained, remembering that this finding does not occur when words are used as stimuli.

In order to explore the meaning of these 3 factors further, we noted which scenes were particularly high or low, on the average, on each of the factors. From that analysis (See Table 13) we found some support for the idea that the factors were respectively Evaluation, Potency and Activity.

Another interest we had was in the idea of possibly developing a variety of attitudinal scales from the Semantic Differential analysis of responses to pictures of various types. One possibility was development of a scale of "attitude toward interracial situations." Another was the development of a scale measuring "attitude toward poverty." From Table 12 we found that scenes 3 and 10 seemed to be related in the interracial area and that scenes

4 and 8 were interrelated and reflected an attitude toward poverty type of area of measurement. In order to develop these areas of interest considerably more work needs to be done, however, our present studies seem to indicate some considerable promise in this direction. A scale using pictures depicting black people in a variety of scenes and analyzed using the Semantic Differential format also seems feasible based on our present study.

Each of these attitude scales could be developed so as to give us a simple straightforward objective measurement of these hard to measure attitudes, in line with a useful and theoretically meaningful frame of reference. Further, this could be done in group administration situations and with an instrument which is not easily faked. However, more research work in this area needs to be done before this ideal situation is obtained.

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APPENDIX

Table 1

Scene One

Black man in dashiki

EVALUATION

| | | 1 | 4 | 7 | 10 | 13 | 15 | 16 | 17 |
|---|---|---|---|---|---|---|---|---|---|
| good-bad | 1 | | .28 | .50 | .33 | .26 | .51 | .47 | .71 |
| kind-cruel | 4 | | | .31 | .14 | -.05 | .25 | .21 | .44 |
| clean-dirty | 7 | | | | .28 | .25 | .45 | .42 | .70 |
| successful-unsuccessful | 10 | | | | | .30 | .49 | .30 | .64 |
| important-unimportant | 13 | | | | | | .43 | .32 | .58 |
| wise-foolish | 15 | | | | | | | .44 | .78 |
| healthy-sick | 16 | | | | | | | | .70 |
| Total Evaluation | 17 | | | | | | | | |

POTENCY

| | | 2 | 5 | 8 | 11 | 14 | 18 |
|---|---|---|---|---|---|---|---|
| hard-soft | 2 | | .21 | .27 | -.15 | .10 | .53 |
| strong-weak | 5 | | | .19 | .23 | .27 | .65 |
| heavy-light | 8 | | | | .00 | .22 | .61 |
| masculine-feminine | 11 | | | | | .06 | .37 |
| large-small | 14 | | | | | | .58 |
| Total Potency | 18 | | | | | | |

ACTIVITY

| | | 3 | 6 | 9 | 12 | 19 |
|---|---|---|---|---|---|---|
| active-passive | 3 | | .50 | .24 | .41 | .77 |
| excitable-calm | 6 | | | .26 | .41 | .77 |
| hot-cold | 9 | | | | .33 | .58 |
| fast-slow | 12 | | | | | .74 |
| Total Activity | 19 | | | | | |

r .01 = .20
r .05 = .15 N = 146

Table 2

Scene Two

Two men on park bench - interracial

EVALUATION

| | | 1 | 4 | 7 | 10 | 13 | 15 | 16 | 17 |
|---|---|---|---|---|---|---|---|---|---|
| good-bad | 1 | | +.66 | +.43 | +.37 | +.36 | +.55 | +.57 | +.74 |
| kind-cruel | 4 | | | +.54 | +.51 | +.38 | +.67 | +.55 | +.82 |
| clean-dirty | 7 | | | | +.28 | +.19 | +.37 | +.49 | +.60 |
| successful-unsuccessful | 10 | | | | | +.49 | +.65 | +.51 | +.75 |
| important-unimportant | 13 | | | | | | +.60 | +.40 | +.64 |
| wise-foolish | 15 | | | | | | | +.51 | +.82 |
| healthy-sick | 16 | | | | | | | | +.76 |
| Total Evaluation | 17 | | | | | | | | |

POTENCY

| | | 2 | 5 | 8 | 11 | 14 | 18 |
|---|---|---|---|---|---|---|---|
| hard-soft | 2 | | -.18 | .29 | .01 | -.11 | +.39 |
| strong-weak | 5 | | | -.02 | .07 | .24 | +.45 |
| heavy-light | 8 | | | | -.02 | .02 | +.49 |
| masculine-feminine | 11 | | | | | +.25 | +.51 |
| large-small | 14 | | | | | | +.59 |
| Total Potency | 18 | | | | | | |

ACTIVITY

| | | 3 | 6 | 9 | 12 | 19 |
|---|---|---|---|---|---|---|
| active-passive | 3 | | .07 | .10 | .33 | .69 |
| excitable-calm | 6 | | | -.11 | +.28 | +.49 |
| hot-cold | 9 | | | | +.22 | +.45 |
| fast-slow | 12 | | | | | +.75 |
| Total Activity | 19 | | | | | |

r .01 = .20
r .05 = .15  N = 146

Table 3

Scene Three

Youngster on man's shoulders - interracial

EVALUATION

| | | 20 | 23 | 26 | 29 | 32 | 34 | 35 | 36 |
|---|---|---|---|---|---|---|---|---|---|
| good-bad | 20 | | +.68 | +.49 | +.31 | +.43 | .43 | .60 | .78 |
| kind-cruel | 23 | | | +.35 | +.23 | +.31 | +.29 | .45 | .63 |
| clean-dirty | 26 | | | | +.22 | +.21 | +.19 | .35 | .54 |
| successful-unsuccessful | 29 | | | | | +.44 | +.40 | .42 | .67 |
| important-unimportant | 32 | | | | | | +.51 | .33 | .71 |
| wise-foolish | 34 | | | | | | | .34 | .69 |
| healthy-sick | 35 | | | | | | | | .73 |
| Total Evaluation | 36 | | | | | | | | |

POTENCY

| | | 21 | 24 | 27 | 30 | 33 | 37 |
|---|---|---|---|---|---|---|---|
| hard-soft | 21 | | -.07 | .10 | .06 | .01 | .36 |
| strong-weak | 24 | | | -.02 | .42 | .35 | .58 |
| heavy-light | 27 | | | | .03 | .08 | .47 |
| masculine-faminine | 30 | | | | | .15 | .63 |
| large-small | 33 | | | | | | .58 |
| Total Potency | 37 | | | | | | |

ACTIVITY

| | | 22 | 25 | 28 | 31 | 38 |
|---|---|---|---|---|---|---|
| active-passive | 22 | | .19 | .19 | .35 | .65 |
| excitable-calm | 25 | | | .14 | .32 | .73 |
| hot-cold | 28 | | | | .03 | .47 |
| fast-slow | 31 | | | | | .67 |
| Total Activity | 38 | | | | | |

r .01 = .20
2 .05 = .15 N = 146

Table 4

Scene Four

Tenement - Black

EVALUATION

| | | 20 | 23 | 26 | 29 | 32 | 34 | 35 | 36 |
|---|---|---|---|---|---|---|---|---|---|
| good-bad | 20 | | .28 | .17 | .23 | -.12 | .21 | .37 | .49 |
| kind-cruel | 23 | | | .25 | .08 | -.17 | .21 | .22 | .45 |
| clean-dirty | 26 | | | | .48 | -.05 | .23 | .50 | .66 |
| successful-unsuccessful | 29 | | | | | .05 | .39 | .44 | .69 |
| important-unimportant | 32 | | | | | | .10 | -.02 | .29 |
| wise-foolish | 34 | | | | | | | .26 | .62 |
| healthy-sick | 35 | | | | | | | | .70 |
| Total Evaluation | 36 | | | | | | | | |

POTENCY

| | | 21 | 24 | 27 | 30 | 33 | 37 |
|---|---|---|---|---|---|---|---|
| hard-soft | 21 | | -.01 | .25 | -.12 | .07 | .37 |
| strong-weak | 24 | | | .24 | .12 | .24 | .66 |
| heavy-light | 27 | | | | -.01 | .22 | .58 |
| masculine-feminine | 30 | | | | | .18 | .37 |
| large-small | 33 | | | | | | .69 |
| Total Potency | 37 | | | | | | |

ACTIVITY

| | | 22 | 25 | 28 | 31 | 38 |
|---|---|---|---|---|---|---|
| active-passive | 22 | | .39 | .32 | .38 | .80 |
| excitable-calm | 25 | | | .18 | .11 | .62 |
| hot-cold | 28 | | | | .19 | .64 |
| fast-slow | 31 | | | | | .60 |
| Total Activity | 38 | | | | | |

r .01 = .20
r .05 = .15  N = 146

Table 5

Scene Five

Man in tunnel - w

EVALUATION

| | | 39 | 42 | 45 | 48 | 51 | 53 | 54 | 55 |
|---|---|---|---|---|---|---|---|---|---|
| good-bad | 39 | | .45 | .34 | .47 | .12 | .48 | .51 | .74 |
| kind-cruel | 42 | | | .54 | .28 | -.25 | .27 | .41 | .57 |
| clean-dirty | 45 | | | | .30 | -.02 | .24 | .43 | .62 |
| successful-unsuccessful | 48 | | | | | .24 | .43 | .44 | .72 |
| important-unimportant | 51 | | | | | | .33 | .03 | .36 |
| wise-foolish | 53 | | | | | | | .47 | .72 |
| healthy-sick | 54 | | | | | | | | .73 |
| Total Evaluation | 55 | | | | | | | | |

POTENCY

| | | 40 | 43 | 46 | 49 | 52 | 56 |
|---|---|---|---|---|---|---|---|
| hard-soft | 40 | | .15 | .39 | .11 | .15 | .59 |
| strong-weak | 43 | | | .06 | .27 | .46 | .67 |
| heavy-light | 46 | | | | -.08 | .16 | .53 |
| masculine-feminine | 49 | | | | | .21 | .14 |
| large-small | 52 | | | | | | .69 |
| Total Potency | 56 | | | | | | |

ACTIVITY

| | | 41 | 44 | 47 | 50 | 57 |
|---|---|---|---|---|---|---|
| active-passive | 41 | | .33 | .28 | .47 | .75 |
| excitable-calm | 44 | | | .01 | .45 | .66 |
| hot-cold | 47 | | | | .24 | .55 |
| fast-slow | 50 | | | | | .78 |
| Total Activity | 57 | | | | | |

r .01 = .20
r .05 = .15  N = 146

Table 6

Scene Six

Three men on the stairs - interracial

EVALUATION

| | | 58 | 61 | 64 | 67 | 70 | 72 | 73 | 74 |
|---|---|---|---|---|---|---|---|---|---|
| good-bad | 58 | | .69 | .66 | .66 | .34 | .48 | .71 | .85 |
| kind-cruel | 61 | | | .23 | .33 | .33 | .23 | .13 | .30 |
| clean-dirty | 64 | | | | .59 | .28 | .49 | .66 | .80 |
| successful-unsuccessful | 67 | | | | | .46 | .58 | .58 | .82 |
| important-unimportant | 70 | | | | | | .55 | .35 | .58 |
| wise-foolish | 72 | | | | | | | .54 | .74 |
| healthy-sick | 73 | | | | | | | | .84 |
| Total Evaluation | 74 | | | | | | | | |

POTENCY

| | | 59 | 62 | 65 | 68 | 71 | 75 |
|---|---|---|---|---|---|---|---|
| hard-soft | 59 | | -.12 | .59 | .08 | -.11 | .54 |
| strong-weak | 62 | | | -.02 | .21 | .45 | .52 |
| heavy-light | 65 | | | | .08 | -.12 | .59 |
| masculine-feminine | 68 | | | | | .21 | .56 |
| large-small | 71 | | | | | | .51 |
| Total Potency | 75 | | | | | | |

ACTIVITY

| | | 60 | 63 | 66 | 69 | 76 |
|---|---|---|---|---|---|---|
| active-passive | 60 | | -.01 | .09 | .34 | .61 |
| excitable-calm | 63 | | | .07 | .09 | .56 |
| hot-cold | 66 | | | | .15 | .50 |
| fast-slow | 69 | | | | | .65 |
| Total Activity | 76 | | | | | |

r .01 = .20
r .05 = .15  N = 146

Table 7

## Scene Seven

Black youngsters on a playground

### EVALUATION

| | | 39 | 42 | 45 | 48 | 51 | 53 | 54 | 55 |
|---|---|---|---|---|---|---|---|---|---|
| good-bad | 39 | | .67 | .68 | .43 | .36 | .61 | .61 | .84 |
| kind-cruel | 42 | | | .57 | .46 | .32 | .47 | .43 | .74 |
| clean-dirty | 45 | | | | .35 | .39 | .50 | .59 | .79 |
| successful-unsuccessful | 48 | | | | | .31 | .51 | .35 | .66 |
| important-unimportant | 51 | | | | | | .56 | .33 | .64 |
| wise-foolish | 53 | | | | | | | .40 | .78 |
| healthy-sick | 54 | | | | | | | | .71 |
| Total Evaluation | 55 | | | | | | | | |

### POTENCY

| | | 40 | 43 | 46 | 49 | 52 | 56 |
|---|---|---|---|---|---|---|---|
| hard-soft | 40 | | .15 | .53 | .33 | .04 | .70 |
| strong-weak | 43 | | | .12 | .51 | .28 | .58 |
| heavy-light | 46 | | | | .28 | .06 | .70 |
| masculine-feminine | 49 | | | | | .17 | .69 |
| large-small | 52 | | | | | | .46 |
| Total Potency | 56 | | | | | | |

### ACTIVITY

| | | 41 | 44 | 47 | 50 | 57 |
|---|---|---|---|---|---|---|
| active-passive | 41 | | .03 | -.03 | .19 | .43 |
| excitable-calm | 44 | | | .15 | .21 | .69 |
| hot-cold | 47 | | | | .29 | .55 |
| fast-slow | 50 | | | | | .69 |
| Total Activity | 57 | | | | | |

r .01 = .20
r .05 = .15 N = 146

Table 8

## Scene Eight

Poor people in front of pawn shop - B

### EVALUATION

| | | 58 | 61 | 64 | 67 | 70 | 72 | 73 | 74 |
|---|---|---|---|---|---|---|---|---|---|
| good-bad | 58 | | +.37 | +.29 | +.29 | +.02 | +.43 | +.45 | +.63 |
| kind-cruel | 61 | | | +.32 | +.21 | -.08 | +.30 | +.47 | +.57 |
| clean-dirty | 64 | | | | +.31 | +.06 | +.45 | +.54 | +.68 |
| successful-unsuccessful | 67 | | | | | +.14 | +.46 | +.30 | +.66 |
| important-unimportant | 70 | | | | | | +.14 | -.23 | +.33 |
| wise-foolish | 72 | | | | | | | +.35 | +.72 |
| healthy-sick | 73 | | | | | | | | +.64 |
| Total Evaluation | 74 | | | | | | | | |

### POTENCY

| | | 59 | 62 | 65 | 68 | 71 | 75 |
|---|---|---|---|---|---|---|---|
| hard-soft | 59 | | +.05 | +.38 | +.10 | -.06 | +.46 |
| strong-weak | 62 | | | +.07 | +.09 | +.26 | +.56 |
| heavy-light | 65 | | | | +.06 | +.14 | +.54 |
| masculine-feminine | 68 | | | | | +.18 | +.43 |
| large-small | 71 | | | | | | +.53 |
| Total Potency | 75 | | | | | | |

### ACTIVITY

| | | 60 | 63 | 66 | 69 | 76 |
|---|---|---|---|---|---|---|
| active-passive | 60 | | +.30 | +.10 | +.40 | +.73 |
| excitable-calm | 63 | | | +.19 | +.10 | +.60 |
| hot-cold | 66 | | | | +.19 | +.58 |
| fast-slow | 69 | | | | | +.65 |
| Total Activity | 76 | | | | | |

r .01 = .20
r .05 = .15  N = 146

Table 9

## Scene Nine

### Man in a tunnel #2 (B)

### EVALUATION

| | | 77 | 80 | 83 | 86 | 89 | 91 | 92 | 93 |
|---|---|---|---|---|---|---|---|---|---|
| good-bad | 77 | | .54 | .53 | .60 | .21 | .48 | .52 | .79 |
| kind-cruel | 80 | | | .46 | .52 | .00 | .45 | .54 | .70 |
| clean-dirty | 83 | | | | .40 | .23 | .43 | .48 | .72 |
| successful-unsuccessful | 86 | | | | | .21 | .53 | .49 | .76 |
| important-unimportant | 89 | | | | | | .36 | .10 | .45 |
| wise-foolish | 91 | | | | | | | .47 | .74 |
| healthy-sick | 92 | | | | | | | | .73 |
| Total Evaluation | 93 | | | | | | | | |

### POTENCY

| | | 78 | 81 | 84 | 87 | 90 | 94 |
|---|---|---|---|---|---|---|---|
| hard-soft | 78 | | .03 | . 39 | .06 | .03 | .34 |
| strong-weak | 81 | | | -.02 | .15 | .43 | .64 |
| heavy-light | 84 | | | | -.02 | .03 | .35 |
| masculine-feminine | 87 | | | | | -.03 | .31 |
| large-small | 90 | | | | | | .52 |
| Total Potency | 94 | | | | | | |

### ACTIVITY

| | | 79 | 82 | 85 | 88 | 95 |
|---|---|---|---|---|---|---|
| active-passive | 79 | | .08 | .28 | .24 | .53 |
| excitable-calm | 82 | | | .18 | .22 | .31 |
| hot-cold | 85 | | | | .07 | .41 |
| fast-slow | 88 | | | | | .34 |
| Total Activity | 95 | | | | | |

r .01 = .20
r .05 = .15  N = 146

Table 10

Scene Ten

Woman with two children - interracial

EVALUATION

| | | 96 | 99 | 102 | 105 | 108 | 110 | 111 | 112 |
|---|---|---|---|---|---|---|---|---|---|
| good-bad | 96 | | .67 | .64 | .54 | .31 | .42 | .54 | .77 |
| kind-cruel | 99 | | | .72 | .46 | .27 | .52 | .60 | .79 |
| clean-dirty | 102 | | | | .53 | .38 | .46 | .61 | .82 |
| successful-unsuccessful | 105 | | | | | .43 | .52 | .38 | .74 |
| important-unimportant | 108 | | | | | | .53 | .26 | .61 |
| wise-foolish | 110 | | | | | | | .49 | .76 |
| healthy-sick | 111 | | | | | | | | .74 |
| Total Evaluation | 112 | | | | | | | | |

POTENCY

| | | 97 | 100 | 103 | 106 | 109 | 113 |
|---|---|---|---|---|---|---|---|
| hard-soft | 97 | | -.37 | .22 | .14 | -.19 | .32 |
| strong-weak | 100 | | | -.14 | -.08 | .43 | .36 |
| heavy-light | 103 | | | | .01 | -.13 | .47 |
| masculine-feminine | 106 | | | | | -.01 | .50 |
| large-small | 109 | | | | | | .51 |
| Total Potency | 113 | | | | | | |

ACTIVITY

| | | 98 | 101 | 104 | 107 | 114 |
|---|---|---|---|---|---|---|
| active-passive | 98 | | -.01 | .08 | .25 | .56 |
| excitable-calm | 101 | | | -.02 | .04 | .59 |
| hot-cold | 104 | | | | .27 | .49 |
| fast-slow | 107 | | | | | .62 |
| Total Activity | 114 | | | | | |

r .01 = .20
r .05 = .15 N = 146

Table 11

Scene Eleven

Little Girl (B)

EVALUATION

| | | 77 | 80 | 83 | 86 | 89 | 91 | 92 | 93 |
|---|---|---|---|---|---|---|---|---|---|
| good-bad | 77 | | +.61 | +.80 | +.55 | +.35 | +.48 | +.66 | +.81 |
| kind-cruel | 80 | | | +.62 | +.47 | +.36 | +.60 | +.52 | +.77 |
| clean-dirty | 83 | | | | +.57 | +.32 | +.45 | +.65 | +.80 |
| successful-unsuccessful | 86 | | | | | +.40 | +.46 | +.52 | +.75 |
| important-unimportant | 89 | | | | | | +.62 | +.40 | +.66 |
| wise-foolish | 91 | | | | | | | +.57 | +.78 |
| healthy-sick | 92 | | | | | | | | +.79 |
| Total Evaluation | 93 | | | | | | | | |

POTENCY

| | | 78 | 81 | 84 | 87 | 90 | 94 |
|---|---|---|---|---|---|---|---|
| hard-soft | 78 | | +.01 | +.27 | +.32 | -.09 | +.36 |
| strong-weak | 81 | | | +.05 | +.18 | +.33 | +.62 |
| heavy-light | 84 | | | | +.31 | +.17 | +.60 |
| masculine-feminine | 87 | | | | | +.18 | +.62 |
| large-small | 90 | | | | | | +.65 |
| Total Potency | 94 | | | | | | |

ACTIVITY

| | | 79 | 82 | 85 | 88 | 95 |
|---|---|---|---|---|---|---|
| active-passive | 79 | | +.12 | +.10 | +.23 | +.76 |
| excitable-calm | 82 | | | +.08 | +.01 | +.50 |
| hot-cold | 85 | | | | +.06 | +.42 |
| fast-slow | 88 | | | | | +.53 |
| Total Activity | 95 | | | | | |

r .01 = .20
r .05 = .15 N = 146

Table 12

Scene and "Factor" Intercorrelations

| Scene | Factor | 1P | 1A | 2E | 2P | 2A | 3E | 3P | 3A | 4E | 4P | 4A | 5E | 5P | 5A | 6E | 6P | 6A | 7E | 7P | 7A | 8E | 8P | 8A | 9E | 9P | 9A | 10E | 10P | 10A | 11E | 11P | 11A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Evaluation.. | .24 | -.01 | -.06 | .11 | -.12 | .24 | .17 | .09 | -.03 | .12 | -.01 | .21 | .14 | -.04 | .28 | .01 | .14 | .31 | .06 | .07 | .07 | .11 | -.08 | .12 | -.06 | -.10 | .10 | .14 | .11 | .35 | .09 | .10 |
| 1 | Potency..... | | .40 | -.03 | .30 | -.04 | .21 | .43 | .22 | -.20 | .13 | -.04 | -.21 | .20 | -.14 | .17 | .13 | .02 | .05 | .28 | .23 | -.15 | .18 | -.02 | -.13 | .08 | -.15 | .22 | .16 | .14 | .17 | -.04 | .02 |
| 1 | Activity..... | | | -.02 | .16 | .22 | .01 | .23 | .03 | .01 | .12 | .26 | -.11 | .02 | -.11 | -.01 | .03 | -.03 | .01 | .05 | .21 | -.01 | .02 | .06 | -.04 | .09 | .01 | .08 | .22 | .16 | -.02 | .18 | .18 |
| 2 | Evaluation..... | | | | .16 | .03 | .32 | .06 | .03 | -.11 | .08 | .06 | -.01 | .02 | .06 | .17 | .03 | -.11 | .14 | .06 | -.12 | .09 | .09 | -.05 | .09 | .06 | .04 | .35 | -.11 | -.05 | .05 | .13 | -.01 |
| 2 | Potency..... | | | | | .29 | .16 | .40 | .22 | -.16 | -.03 | -.12 | -.10 | .00 | -.06 | .28 | .17 | .17 | .12 | .22 | .14 | .07 | .01 | -.19 | .04 | .05 | .03 | .15 | .29 | .16 | .13 | -.02 | -.02 |
| 2 | Activity..... | | | | | | -.19 | .08 | .20 | .02 | -.12 | .05 | -.09 | -.13 | -.04 | -.08 | .11 | .18 | -.06 | .10 | .05 | -.08 | -.14 | -.01 | .02 | .04 | .02 | -.15 | .08 | .07 | -.21 | +.17 | .06 |
| 3 | Evaluation..... | | | | | | | .28 | .23 | .29 | .06 | -.10 | -.07 | .19 | -.11 | .43 | .07 | .06 | .26 | .09 | .08 | -.03 | .24 | -.01 | .03 | .01 | -.10 | .65 | .08 | .16 | .42 | -.24 | -.10 |
| 3 | Potency..... | | | | | | | | .34 | .07 | -.02 | -.13 | .02 | .16 | -.09 | .08 | .32 | .20 | .14 | .35 | .21 | .13 | .10 | -.12 | .10 | .07 | -.10 | .26 | .34 | .21 | .17 | -.04 | -.15 |
| 3 | Activity..... | | | | | | | | | -.19 | .01 | -.12 | -.08 | .12 | -.06 | .14 | .22 | .41 | -.12 | .29 | .23 | -.07 | .03 | -.23 | -.04 | -.09 | -.13 | -.02 | .29 | .40 | -.02 | .12 | .00 |
| 4 | Evaluation..... | | | | | | | | | | .14 | .09 | .26 | -.05 | -.02 | -.10 | .05 | .05 | .04 | -.20 | -.03 | .51 | -.00 | .16 | .20 | -.06 | -.00 | -.34 | .03 | -.05 | -.03 | .21 | .09 |
| 4 | Potency..... | | | | | | | | | | | .40 | .07 | .26 | -.06 | .04 | .08 | -.06 | .05 | .12 | .06 | .08 | .48 | .25 | -.12 | .02 | -.12 | .06 | -.03 | .04 | .16 | .07 | .07 |
| 4 | Activity..... | | | | | | | | | | | | -.07 | .06 | +.01 | -.06 | -.12 | -.10 | .06 | -.03 | .02 | -.11 | .22 | .33 | -.05 | .01 | .03 | -.06 | -.10 | -.12 | -.08 | .22 | .20 |
| 5 | Evaluation..... | | | | | | | | | | | | | .12 | .20 | .07 | .10 | .04 | .00 | .01 | -.01 | .42 | -.02 | -.02 | .58 | .02 | .06 | -.16 | -.08 | -.10 | .01 | .06 | -.08 |
| 5 | Potency..... | | | | | | | | | | | | | | .42 | -.01 | .24 | .10 | -.15 | .33 | .05 | -.02 | .30 | .01 | -.01 | .35 | .03 | .04 | -.01 | .03 | .09 | -.19 | -.13 |
| 5 | Activity..... | | | | | | | | | | | | | | | -.01 | .08 | .16 | .14 | .03 | -.03 | .09 | .13 | .17 | .08 | .32 | .46 | -.12 | -.14 | .01 | -.10 | -.14 | -.04 |
| 6 | Evaluation..... | | | | | | | | | | | | | | | | -.18 | .09 | .24 | .01 | -.01 | .13 | .08 | -.02 | .23 | .05 | .10 | .37 | .14 | .06 | .22 | -.11 | -.02 |
| 6 | Potency..... | | | | | | | | | | | | | | | | | .51 | .01 | .28 | .08 | .13 | .16 | -.05 | .08 | .22 | .10 | .08 | .16 | .20 | .19 | -.10 | -.09 |
| 6 | Activity..... | | | | | | | | | | | | | | | | | | -.05 | .03 | .13 | .02 | .13 | .01 | .08 | .07 | .11 | -.20 | .18 | .35 | .07 | .08 | .01 |
| 7 | Evaluation..... | | | | | | | | | | | | | | | | | | | .04 | -.01 | .03 | -.01 | .08 | .07 | .03 | -.00 | .33 | .07 | .07 | .43 | -.08 | .13 |
| 7 | Potency..... | | | | | | | | | | | | | | | | | | | | .42 | -.04 | .14 | -.18 | .06 | .18 | -.06 | .12 | .09 | .04 | .12 | -.11 | -.06 |
| 7 | Activity..... | | | | | | | | | | | | | | | | | | | | | -.05 | .04 | -.11 | -.06 | -.01 | .03 | -.02 | .13 | .27 | -.01 | .01 | .05 |
| 8 | Evaluation..... | | | | | | | | | | | | | | | | | | | | | | -.06 | .03 | .30 | -.09 | -.06 | -.03 | .12 | -.09 | .06 | .04 | -.07 |
| 8 | Potency..... | | | | | | | | | | | | | | | | | | | | | | | .32 | .06 | .23 | .10 | .11 | -.27 | -.05 | .21 | -.10 | .01 |
| 8 | Activity..... | | | | | | | | | | | | | | | | | | | | | | | | -.01 | .01 | .12 | .06 | -.21 | -.15 | .07 | .05 | .20 |
| 9 | Evaluation..... | | | | | | | | | | | | | | | | | | | | | | | | | .22 | .28 | .02 | -.04 | -.02 | .12 | -.05 | -.09 |
| 9 | Potency..... | | | | | | | | | | | | | | | | | | | | | | | | | | .57 | .07 | -.03 | .03 | .06 | -.08 | -.03 |
| 9 | Activity..... | | | | | | | | | | | | | | | | | | | | | | | | | | | -.02 | -.06 | .10 | -.06 | -.03 | .01 |
| 10 | Evaluation..... | | | | | | | | | | | | | | | | | | | | | | | | | | | | .04 | .10 | .37 | -.35 | -.18 |
| 10 | Potency..... | | | | | | | | | | | | | | | | | | | | | | | | | | | | | .43 | .06 | .17 | .03 |
| 10 | Activity..... | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | .07 | -.07 | .07 |
| 11 | Evaluation..... | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | -.18 | .07 |
| 11 | Potency..... | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | .45 |
| 11 | Activity..... | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

r.05 = .15
r.01 = .20 N = 146

Table 13

Average Scores for Each Scene on Evaluation, Potency and Activity

| Scene # | Mean Evaluation | Mean Potency | Mean Activity | Scene Description |
|---|---|---|---|---|
| 1 | 32.7 | 24.9 | 13.8 | Black in Dashiki |
| 2 | 36.1 | 21.4 | 13.7 | Park Bench |
| 3 | 42.3 | 21.8 | 17.9 | Kid on Shoulders |
| 4 | 18.7 | 24.1 | 16.3 | Tenement |
| 5 | 25.3 | 22.2 | 16.3 | Tunnel #1 (W) |
| 6 | 34.7 | 23.4 | 16.8 | Three on the Stairs |
| 7 | 37.3 | 25.7 | 19.1 | Kids on Playground |
| 8 | 19.9 | 23.0 | 15.5 | In Front of Pawnshop |
| 9 | 25.1 | 22.6 | 16.3 | Tunnel #2 (B) |
| 10 | 42.0 | 18.6 | 17.8 | Women with 2 Kids |
| 11 | 39.4 | 14.0 | 13.5 | Little Girl |
| Possible range of scores | 7.0 to 49.0 | 5.0 to 35.0 | 4.0 to 28.0 | |

N = 146

"A Test of Racial Attitudes Using a Thematic Apperception Approach"

By

Robert J. Zito, Jay Roth
and Bernard P. Indik

This paper will discuss the use of a projective approach to the analysis of responses to the use of candid photographs of blacks alone and blacks and whites together to objectively measure attitudes toward race and racial interaction. The work by Indik, Zito, and Roth, 1970, led to the present concern with a more clinical means of measuring the same racial attitudes and feelings. Previous investigations by Zito and Bardon, 1968, and Zito and Bardon, 1969, established the efficacy of using photographs with black subjects in an attempt to measure achievement motivation. Taylor, 1966, employed posed photographs of blacks and whites in order to investigate the development of racial stereotypes in young children.

The present study utilized the first three candid photographs of the eleven used by Indik, Zito, and Roth, 1970. The first picture is of a black man sitting in a chair surrounded by African objects d'art and dressed in a Dashiki. The second and third pictures are interracial: a middle-aged white man and an older black man seated facing each other on a bench outdoors; an adolescent white male with a black boy perched on his shoulders.

The subjects of this study were 50 white evening college students attending Rutgers University, New Jersey. The black subjects were 41 students attending Xavier University, Louisiana. The white subjects formed two classes of undergraduate introductory psychology, while the black students formed a class of undergraduate geography. The black subjects were, on the average, younger than the whites, with the whites having more married subjects than among the blacks.

Sexual proportion was about equal in the white group but there were twice as many males as females in the black group.

The procedure for obtaining data for this study was uniformly followed with both groups of subjects. Immediately after the subjects had utilized the eleven pictures with the Semantic Differential attitudes scale, (Indik, Zito and Roth, 1970), they were asked to look again at the first three pictures, one at a time, and to write an original story about each. The first three pictures were shown individually with a 35 mm. projector. After 60 seconds of exposure, the lights were turned on and four minutes were allowed for the subjects to write each story. The traditional TAT approach was used. That is, the subjects were told to tell their stories as to what has happened, what is going on now, what are the characters thinking or feeling or doing, and what is going to happen.

The original stories produced by the black subjects and the white subjects were analysed in terms of the following factors: a) racial, b) affect, c) identification, and d) intensity. Under the racial dimension, the major consideration was determination of the theme of the story as being either non-racial, implicitly racial (no clear reference to race, but the content appeared to deal with racial matters), and explicitly racial (a clear semantic reference and identification as to race). Only stories that had either implicit or explicit racial themes could be scored further.

The other three dimensions were selected to correspond to the Evaluation, Potency, and Activity factors found in Semantic Differential attitude analysis (Osgood, Suci, and Tannenbaum, 1957). Affect was scored in a story when emotionally loaded words such as "angry," "happy," "sad," etc., were used. A six-point scale from neutral, to strong avoidance, to conflict between approach and avoidance, to strong approach was used. This is intended to

correspond to the for-against (Evaluation) dimension of the SD.

A six-point scale for scoring Identification in terms of active and passive was used ranging from no clear Identification, to strongly passive Identification, to neutral, to strong active Identification. This dimension in the apperceptive test was thought to coincide with the SD Activity dimension, which has to do with the individual's projection of how one acts on his feelings.

The Intensity dimension was scored on a six-point scale from non-aggressive, to low aggressive, to moderately aggressive, to highly aggressive. This was meant to correspond to the SD dimension of Potency, which has to do with the individual's perception of the power of the object.

Two graduate students were trained for several hours in the thematic scoring technique and then they independently scored the stories of the subjects in the study. After determining the existence of a racial theme in a story, the raters were to score the affect level of the theme in terms of either clear approach toward the character or theme or clear avoidance of the character or theme. Elements of both approach and avoidance were scored at the mid-point and considered a conflict situation. Absence of approach and avoidance thema was scored as neutral. The next step in scoring was to determine the Identification thema by which the subject identified either not at all or passively, actively, or in equal amounts which was rated neutral at the mid-point. Identification was with either the theme or the characters in the story. The final dimension to be scored was the Intensity dimension in terms of aggressive resolution of the racial theme from low aggressive resolution, to moderate aggressive resolution, to high aggressive resolution. Where there was no indication of aggressiveness in any degree, the Intensity dimension was scored as zero or non-aggressive.

The results of the two independent ratings of the original stories along the dimensions of Affect, Identification and Intensity revealed that the relatively fine discrimination required along the six-point scale for each dimension was not present in terms of rater agreement. The data trends clearly show much greater rater agreement when a crude collapse is made; that is, lumping the scores into three instead of six categories within each dimension. In effect, this procedure eliminates the necessity for making fine distinctions between such categories, for example, as strong and moderate approach, or strong and moderate active identification.

Table 1 shows the percent of rater agreement on the three picture slides utilized for the variables studied after the crude collapse was made from the original six-point scales to three-point scales.

TABLE 1

Percentage of Rater Agreement

Between the Two Raters

| | Picture | | |
|---|---|---|---|
| | 1 | 2 | 3 |
| Affect | 46. | 54. | 65. |
| Identification | 50. | 36. | 47. |
| Intensity | 60. | 67. | 82. |

Percent of rater agreement was highest for Intensity factors for each of the three pictures used. Agreement on the Identification and Affect were lower. It is likely that aggressive thema or lack of aggression is more obvious than

approach or avoidance Affect or active or Passive Identification. Scorer agreement on the presence of racial vs. nonracial thema was only 68%. This was probably due to the difficulty in scoring for implicitly racial themes.

TABLE 2

Response of Blacks and Whites to

Picture - Story 1

Affect

| | B. | W. |
|---|---|---|
| Approach | 64.1 | 55.9 |
| Approach - Avoidance | 14.7 | 15.0 |
| Avoidance | 21.0 | 29.0 |
| Neutral | 0.0 | 0.0 |

Identification

| | B. | W. |
|---|---|---|
| Active | 86.0 | 54.0 |
| Neutral | 1.3 | 8.6 |
| Passive | 11.3 | 19.9 |
| None | 1.3 | 17.3 |

Intensity

| | B. | W. |
|---|---|---|
| High | 33.4 | 29.6 |
| Moderate | 15.5 | 9.3 |
| Low | 9.2 | 9.3 |
| None | 41.6 | 51.6 |

It is interesting to, as an example, look at the response data in detail for picture one.

Table 2 indicates that on picture 1 both black and white subjects had mainly approach Affect. Conflict over approach and avoidance was low for both groups. However, the black group had much greater identification with the character (black man in Dashiki). No subjects in either groups had neutral Affect on this picture. Very few blacks failed to identify at least passively, while a fairly high percentage of whites did not identify themselves with this picture. High aggressive intensity was about equal in both groups on this picture. Lack of aggressive thema was highest for both groups with blacks lower in this than whites.

The results of this study suggest that elicitation and analysis of thematic stories from candid photographic slides of racial and interracial scenes is reasonably reliable and may have utility in identifying and crudely differentiating racial attitudes. However, further research needs to be conducted with use of more refined definitions, instructions, and training of scorers. Coarser ratings seem more valid when evaluating the original stories. The use of less bland pictures might prove interesting in drawing out basic attitudes towards racial and interracial activities.

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# A Comparison of the Semantic Differential (E,P,A) and Thematic Apperception Analyses of Responses to Interracial Photographs

By

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The utility and practicability of the Semantic Differential as a measure of attitudes toward interracial events, as well as, the potential for utilizing visual stimuli such as photographic slides with the SD as a response analysis scheme has been discussed (Indik, Zito, Roth, 1970). The second study suggested the usefulness of coded thematic material as the response measure to interracial scenes as the visual stimuli (Zito, Roth, Indik, 1970) has also been discussed.

The present paper compares and contrasts the results of the Semantic Differential analysis scheme with the results of the coded thematic material and as well discusses some of the possibilities and trends for the future.

## The Problem

Visual stimuli such as photographic slides have been demonstrated (Indik, et.al. 1970) to be organized in much the same manner around the dimensions established by Osgood, Suci and Tannenbaum, 1957, as Evaluation, Potency, and Activity. Zito's et.al. 1970 paper has dealt at length with a coded analysis of the projective material responded to along with the SD upon the presentation of the slides. The problem here presented is to discuss the relationship, if any, between the E,P, and A dimensions as developed by Indik, et.al. 1970 when photographic slides of racial themes are utilized as the stimuli and projective responses to these same slides by the same subjects as analyzed according to a coded system (Zito, et.al. 1970) utilizing Affect, Intensity, and Identificat-

as the hypothesized dimensions. What is the relationship between Evaluation and Affect; Potency and Intensity; Activity and Identification? It was assumed that a relationship would be found between the three above pairs of variables based upon the notion that ones feelings and attitudes can be studied in different ways by establishing a stimulus which can elicit a series of responses which when systematically studied suggest a coherent and meaningful relationship among differing investigatory approaches; and that this relationship can open new vistas for further study which are intra-psychic, inter-psychic, inter-group and inter-cultural.

The broader question of the relationship between the evaluation of the general responses to the thematic material and the SD responses to that same material gives rise to and touches upon areas of interest such as the nature of projective material, new forms of projective metrics; uses of the SD in clinical diagnoses; cross-cultural studies of clinical materials and the eliciting of a wider and perhaps deeper picture of personality dynamics.

Clinical interpretation of ambiguous visual forms and pictures has been largely based upon the notion that the respondent responds in such a way to the forms and pictures so as to offer the examiner a "view" of the respondent's own conflicts, anxieties, etc. The forms are hypothesized to draw from the respondents material concerning his own fantasies. It is around such fantasies that themes are developed. This potentially rich and varied source of material has often been subjected to criticism concerning problems related to validation, reliability and "objectivity." One of the purposes of the present study would then be to develop a more objective method for the gathering of data concerning ones own "feelings" which can be easily contrasted with the more usual and

"subjective" method of thematic analysis. Such an attempt requires two essential elements. One, that the stimulus material is the same stimulus material which lends itself to each treatment and secondly, that the more "objective" method is able to demonstrate a clear relationship to the scoring of the "subjective" material. The present study relates the results of the Indik, et.al. (1970) paper which does demonstrate a technique for the objective analysis of responses to what is essentially visual forms with the results of the Zito, et.al. (1970) study which takes the same visual forms to which it completes a thematic analysis.

Methodology

The study by Indik, et.al. (1970) utilized 11 slides which were shown to a number of subjects. The Zito, et.al. (1970) study made use of the first three slides only; a black man dressed in a Dashiki; two men, one white and one black, seated on a bench; and a black boy atop the shoulders of a young adult white male (the present authors have attempted, in reporting the scenes, to exclude their own projections).

The Zito, et.al (1970) paper analyzed the three slides according to a coding system which was explained in their paper; the three variables being labelled Affect, Intensity and Identification. Two raters trained independently, scored the stories for racial themes. The three variables concerned the following three questions. One, was there an element of approach or avoidance affect in the written themes; two, was Identification with the theme here present and if so, was it active or passive; and third, was aggressive Intensity present and to what degree. Since two independently trained and separately functioning trainers rated the Affect, Intensity and Identification dimensions

it was necessary for Zito, Roth, and Indik to analyze rater agreement. The Zito, et.al (1970) paper discussed the interrater agreement findings.

Results

Table 1 shows the relationship between each pair of variables for each of the first three slides for the two raters. Generally, there is no meaningful pattern covariation between the Semantic Differential Evaluation vs. Affect, S.D. Potency vs. Intensity and S.D. Activity vs. Identification.

TABLE 1 [1]

Relationship Among Variables on Pictures 1, 2, and 3 for Each Rater

| | Rater A | | Rater B | |
|---|---|---|---|---|
| Picture # 1 | Gamma | N | Gamma | N |
| S.D. Evaluation vs. Affect | +.011 | (129) | +.098 | (129) |
| S.D. Potency vs. Intensity | +.192 | (129) | +.218 | (129) |
| S.D. Activity vs. Identification | +.069 | (129) | +.190 | (129) |
| Picture # 2 | | | | |
| S.D. Evaluation vs. Affect | -.136 | (100) | -.082 | (100) |
| S.D. Potency vs. Intensity | +.064 | (100) | +.274 | (100) |
| S.D. Activity vs. Identification | +.030 | (100) | +.094 | (100) |
| Picture # 3 | | | | |
| S.D. Evaluation vs. Affect | +.196 | ( 99) | +.104 | ( 99) |
| S.D. Potency vs. Intensity | -.202 | ( 99) | -.182 | ( 99) |
| S.D. Activity vs. Identification | +.201 | ( 99) | +.103 | ( 99) |

[1] The data above was arrived at utilizing Matilda Riley's Sociological Research: II Exercises and Manual, Harcourt, Brace and World, New York, 1963 on the computation of gamma using absolute frequencies rather than percentages.

## Discussion

It can be seen from Table 1 that no high correlations can be found among the pairs of variables and further that among some of the variables, poor interrater agreement is also operating to reduce the size of the correlations found. A relationship is suggested on picture one and perhaps two for Potency versus Intensity but not one high enough to reach any conclusions. The negative relationships also are not of the magnitude to draw any strong conclusions.

First, it is felt that some rater confusion as to the dimensions in question gave rise to less than satisfactory interrater agreement. More time and specificity needs to be spent in training of the raters before they proceed to do their scoring.

Secondly, and even more important, it is felt that the pictures themselves were relatively bland in terms of possible racial and interracial themes. It is suggested that were the pictures to have been more "loaded" emotionally, the consequences of more emotional stimuli would tend to demonstrate more response variance and a greater magnitude of relationship, especially between Potency and Intensity as well as between Activity and Identification. A study is now planned whereby some pictures extremely high in emotional content are to be contrasted with those considered relatively bland on racial themes. More emotionally loaded pictures might be a young white mother nursing a black baby; a fight between blacks and whites; or a scene in which blacks are destitute searching for food. It can be seen that each of the above examples have other areas of emotionality besides race but these variables can be excluded factorially.

Thirdly, as Indik, et.al. (1970) suggests, the findings for inter-item

and item total correlation for Potency and Activity indicates less coherence of these dimensions under the conditions of the use of pictures as stimuli and more work with "picture selection" again seems to be in order; as well as increasing the sampling scope.

Attitude toward racial and interracial themes are complicated, often confused and hidden and dependent on known as well as unknown variables. Indeed, much remains unknown concerning the stimulus properties of the thematic materials themselves. It would seem that under such conditions, every attempt possible be made to move from the more subjective approach alone to more quantifiable approaches which might improve the adequacy of clinical integration, always keeping in mind the richness and health of the subjective clinical approaches. It seems that many of the attempts to "make more objective" the clinical as well as therapeutic analysis wend up in a diluting or narrowing of what clinicians understand to be the necessary richness and depth which allows assessment as meaningful and relevant. The present series of studies, among other things, suggests that both the subjective analysis of the thematic material and a method for a systematic and objective analysis of the same material is possible and that the combined material has the potential for adding to and enriching the "Gastalt" while at the same time satisfying the psychometricians concerns for objectivity of measurement, reliability and validity. The related question arises as to the possible plan of the Semantic Differential technique using visual stimuli in clinical diagnoses itself.

If racial themes lend themselves to analysis by the SD then other themes must also be considered for such analysis, such as feelings regarding sexuality, youth, violence, etc. If visual stimuli depicting such themes can be developed,

tested and shown to be applicable to the SD analysis technique then a whole area of investigations concerning subjective attitudes and feelings might lend themselves to wider and more quantifiable investigations than are presently available.

A further area of exploration concerns cross-cultural studies of clinical materials. It is presently a difficult matter to discuss the subjective response to thematic material in a culturally comparative manner since the "clinical picture" is partially dependent upon material which may be "culturally determined." The S.D.-thematic combined evaluation may shed new light on some of the psychodynamic factors operating in personalities of diverse cultures.

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